CLAIMS

1.   A method for operating a virtual machine to provide continuation passing in a wireless device, wherein the virtual machine comprises a stack memory, and the method comprises:

encountering a context-creating trigger;

constructing a continuation block in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;

encountering an evaluation instruction; and

storing the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.

2.   The method of claim 1, wherein the context-creating trigger comprises a selected program instruction.

3.   The method of claim 1, wherein the context-creating trigger comprises a program marker associated with a program instruction.

4.   The method of claim 1, further comprising storing the continuation block in a memory.

5.   The method of claim 1, further comprising jumping to selected program code to evaluate the continuation.

6.   A virtual machine for use in a wireless device having an embedded processor, the virtual machine comprising:

a stack memory that comprises logic to store and retrieve information;

logic to encounter a context-creating trigger;

logic to construct a continuation block in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;

logic to encounter an evaluation instruction; and

logic to store the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.

7.   The virtual machine of claim 6, wherein the context-creating trigger comprises a context evaluation instruction.

8.   The virtual machine of claim 6, wherein the context-creating trigger comprises a program marker associated with a program instruction.

9.   The virtual machine of claim 6, further comprising logic to store the continuation block in a memory.

10.   The virtual machine of claim 6, further comprising logic to jump to selected program code to evaluate the continuation.

11.   A computer readable media comprising program instructions that when executed by processing logic provides a VM that performs continuation passing, wherein the virtual machine comprises a stack memory, and the computer readable media comprises:

program instructions for encountering a context-creating trigger;

program instructions for constructing a continuation block in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;

program instructions for encountering an evaluation instruction; and

program instructions for storing the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.

12.   A virtual machine for use in a wireless device having an embedded processor, the virtual machine comprising:

means for providing a stack memory

means for encountering a context-creating trigger;

means for constructing a continuation block in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;

means for encountering an evaluation instruction; and

means for storing the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.

13.   The virtual machine of claim 12, further comprising means for storing the continuation block in a memory.

14.   The virtual machine of claim 12, further comprising means for jumping to selected program code to evaluate the continuation.

15.   A wireless device having an embedded processor, the wireless device comprising:

a stack memory that comprises logic to store and retrieve information; and

a virtual machine that operates to perform continuation passing, the virtual machine comprising:

logic to encounter a context-creating trigger;

logic to construct a continuation block in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;

logic to encounter an evaluation instruction; and

logic to store the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.